



UNITED STATES PATENT AND TRADEMARK OFFICE

mf

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/517,329

12/09/2004

Jason William Darke

2733.18US01

2913

24113

7590

10/27/2006

PATTERSON, THUENTE, SKAAR & CHRISTENSEN, P.A.
4800 IDS CENTER
80 SOUTH 8TH STREET
MINNEAPOLIS, MN 55402-2100

EXAMINER

ZANELLI, MICHAEL J

ART UNIT

PAPER NUMBER

3661

DATE MAILED: 10/27/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Interview Summary	Application No.	Applicant(s)	
	10/517,329	DARKE, JASON WILLIAM	
	Examiner	Art Unit	
	Michael J. Zanelli	3661	

All participants (applicant, applicant's representative, PTO personnel):

- (1) Michael J. Zanelli, PTOi. (3) _____
 (2) Douglas Christensen (35480). (4) _____

Date of Interview: 18 October 2006.

Type: a) ☒ Telephonic b) ☐ Video Conference
 c) ☐ Personal [copy given to: 1) ☐ applicant 2) ☐ applicant's representative]

Exhibit shown or demonstration conducted: d) ☐ Yes e) ☒ No.
 If Yes, brief description: _____

Claim(s) discussed: proposed new claims 19-43.

Identification of prior art discussed: none.

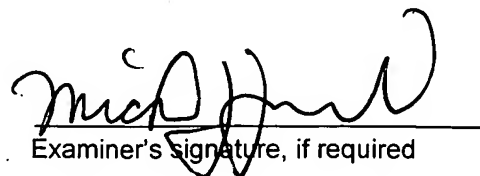
Agreement with respect to the claims f) ☒ was reached. g) ☐ was not reached. h) ☐ N/A.

Substance of Interview including description of the general nature of what was agreed to if an agreement was reached, or any other comments: Proposed cancelling previous claims 1-18 and substituting therefor newly proposed independent claims 19, 30, 33, 34 and 36-39. The newly proposed independent claims incorporate subject matter of previously allowable claims 3, 8, 11 and 13. Examiner indicated the proposed changes would overcome the rejection of record, but the claims would have to be reviewed for 112/2 issues. Indicated the proposed drawing change was acceptable.

(A fuller description, if necessary, and a copy of the amendments which the examiner agreed would render the claims allowable, if available, must be attached. Also, where no copy of the amendments that would render the claims allowable is available, a summary thereof must be attached.)

THE FORMAL WRITTEN REPLY TO THE LAST OFFICE ACTION MUST INCLUDE THE SUBSTANCE OF THE INTERVIEW. (See MPEP Section 713.04). If a reply to the last Office action has already been filed, APPLICANT IS GIVEN A NON-EXTENDABLE PERIOD OF THE LONGER OF ONE MONTH OR THIRTY DAYS FROM THIS INTERVIEW DATE, OR THE MAILING DATE OF THIS INTERVIEW SUMMARY FORM, WHICHEVER IS LATER, TO FILE A STATEMENT OF THE SUBSTANCE OF THE INTERVIEW. See Summary of Record of Interview requirements on reverse side or on attached sheet.

Examiner Note: You must sign this form unless it is an Attachment to a signed Office action.


 Examiner's Signature, if required

Summary of Record of Interview Requirements

Manual of Patent Examining Procedure (MPEP), Section 713.04, Substance of Interview Must be Made of Record

A complete written statement as to the substance of any face-to-face, video conference, or telephone interview with regard to an application must be made of record in the application whether or not an agreement with the examiner was reached at the interview.

Title 37 Code of Federal Regulations (CFR) § 1.133 Interviews

Paragraph (b)

In every instance where reconsideration is requested in view of an interview with an examiner, a complete written statement of the reasons presented at the interview as warranting favorable action must be filed by the applicant. An interview does not remove the necessity for reply to Office action as specified in §§ 1.111, 1.135. (35 U.S.C. 132)

37 CFR §1.2 Business to be transacted in writing.

All business with the Patent or Trademark Office should be transacted in writing. The personal attendance of applicants or their attorneys or agents at the Patent and Trademark Office is unnecessary. The action of the Patent and Trademark Office will be based exclusively on the written record in the Office. No attention will be paid to any alleged oral promise, stipulation, or understanding in relation to which there is disagreement or doubt.

The action of the Patent and Trademark Office cannot be based exclusively on the written record in the Office if that record is itself incomplete through the failure to record the substance of interviews.

It is the responsibility of the applicant or the attorney or agent to make the substance of an interview of record in the application file, unless the examiner indicates he or she will do so. It is the examiner's responsibility to see that such a record is made and to correct material inaccuracies which bear directly on the question of patentability.

Examiners must complete an Interview Summary Form for each interview held where a matter of substance has been discussed during the interview by checking the appropriate boxes and filling in the blanks. Discussions regarding only procedural matters, directed solely to restriction requirements for which interview recordation is otherwise provided for in Section 812.01 of the Manual of Patent Examining Procedure, or pointing out typographical errors or unreadable script in Office actions or the like, are excluded from the interview recordation procedures below. Where the substance of an interview is completely recorded in an Examiners Amendment, no separate Interview Summary Record is required.

The Interview Summary Form shall be given an appropriate Paper No., placed in the right hand portion of the file, and listed on the "Contents" section of the file wrapper. In a personal interview, a duplicate of the Form is given to the applicant (or attorney or agent) at the conclusion of the interview. In the case of a telephone or video-conference interview, the copy is mailed to the applicant's correspondence address either with or prior to the next official communication. If additional correspondence from the examiner is not likely before an allowance or if other circumstances dictate, the Form should be mailed promptly after the interview rather than with the next official communication.

The Form provides for recordation of the following information:

- Application Number (Series Code and Serial Number)
- Name of applicant
- Name of examiner
- Date of interview
- Type of interview (telephonic, video-conference, or personal)
- Name of participant(s) (applicant, attorney or agent, examiner, other PTO personnel, etc.)
- An indication whether or not an exhibit was shown or a demonstration conducted
- An identification of the specific prior art discussed
- An indication whether an agreement was reached and if so, a description of the general nature of the agreement (may be by attachment of a copy of amendments or claims agreed as being allowable). Note: Agreement as to allowability is tentative and does not restrict further action by the examiner to the contrary.
- The signature of the examiner who conducted the interview (if Form is not an attachment to a signed Office action)

It is desirable that the examiner orally remind the applicant of his or her obligation to record the substance of the interview of each case. It should be noted, however, that the Interview Summary Form will not normally be considered a complete and proper recordation of the interview unless it includes, or is supplemented by the applicant or the examiner to include, all of the applicable items required below concerning the substance of the interview.

A complete and proper recordation of the substance of any interview should include at least the following applicable items:

- 1) A brief description of the nature of any exhibit shown or any demonstration conducted,
- 2) an identification of the claims discussed,
- 3) an identification of the specific prior art discussed,
- 4) an identification of the principal proposed amendments of a substantive nature discussed, unless these are already described on the Interview Summary Form completed by the Examiner,
- 5) a brief identification of the general thrust of the principal arguments presented to the examiner,
(The identification of arguments need not be lengthy or elaborate. A verbatim or highly detailed description of the arguments is not required. The identification of the arguments is sufficient if the general nature or thrust of the principal arguments made to the examiner can be understood in the context of the application file. Of course, the applicant may desire to emphasize and fully describe those arguments which he or she feels were or might be persuasive to the examiner.)
- 6) a general indication of any other pertinent matters discussed, and
- 7) if appropriate, the general results or outcome of the interview unless already described in the Interview Summary Form completed by the examiner.

Examiners are expected to carefully review the applicant's record of the substance of an interview. If the record is not complete and accurate, the examiner will give the applicant an extendable one month time period to correct the record.

Examiner to Check for Accuracy

If the claims are allowable for other reasons of record, the examiner should send a letter setting forth the examiner's version of the statement attributed to him or her. If the record is complete and accurate, the examiner should place the indication, "Interview Record OK" on the paper recording the substance of the interview along with the date and the examiner's initials.

PATTERSON | THUENTE | IP
SKAAR | CHRISTENSEN

Patent, Trademark, Copyright, Internet & Related Issues

Patterson, Thuent, Skaar & Christensen, P.A.

4800 IDS Center
80 South 8th Street
Minneapolis, MN
55402-2100

t: 612.349.5740
t: 800.331.4537
f: 612.349.9266
www.ptsllaw.com

FACSIMILE COVER SHEET

TOTAL NUMBER OF PAGES BEING SENT (INCLUDING COVER SHEET): 8/6

☐ Original documents to follow by mail☒ No originals will be sentDATE: October 17th, 2006TO: Examiner Michael J. Zanelli
Group Art Unit 3661273 676 9
FAX #: 571-273-8300

PHONE #: 571-272-6969

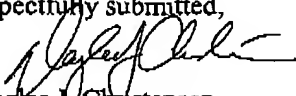
Application No.: 10/517,329
Applicant: Jason William Darke

OUR REF.: 2733.18US01

FROM: Douglas J. Christensen/atp
PHONE #: 612-349-3001Attached please find the following for discussion purposes:

- (1) Amendment in response to Office Action dated June 22, 2006;
- (2) One (1) sheet of replacement drawings;
- (3) One (1) sheet annotated drawings; and
- (4) Applicant Initiated Interview Request Form

Respectfully submitted,


Douglas J. Christensen
Registration No. 35,480

THIS FACSIMILE TRANSMISSION CONTAINS LEGALLY PRIVILEGED AND CONFIDENTIAL INFORMATION INTENDED FOR THE PARTY IDENTIFIED ABOVE. IF YOU HAVE RECEIVED THIS TRANSMISSION IN ERROR, PLEASE CALL PATTERSON, THUENTE, SKAAR & CHRISTENSEN COLLECT AT (612) 349-5740. DISTRIBUTION, REPRODUCTION OR ANY OTHER USE OF THIS TRANSMISSION BY ANY PARTY OTHER THAN THE INTENDED RECIPIENT IS STRICTLY PROHIBITED.

FACSIMILE SENT BY 

Applicant Initiated Interview Request Form

Application No.: 10/517,329 First Named Applicant: Darke
 Examiner: Zanelli Art Unit: 3661 Status of Application: 1st o.a.

Tentative Participants:

(1) Douglas Christensen (2) Michael J. Zanelli
 (3) _____ (4) _____

Proposed Date of Interview: Oct. 18, 2006 Proposed Time: 11:00 (AM/PM)

Type of Interview Requested:

(1) ☒ Telephonic (2) ☐ Personal (3) ☐ Video Conference

Exhibit To Be Shown or Demonstrated: ☐ YES ☒ NO

If yes, provide brief description: _____

Issues To Be Discussed

Issues (Rej., Obj., etc)	Claims/ Fig. #s	Prior Art	Discussed	Agreed	Not Agreed
(1) <u>Obj.</u>	<u>Fig 1</u>	_____	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
(2) <u>New claims</u>	<u>19-43</u>	_____	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
(3) _____	_____	_____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(4) _____	_____	_____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Continuation Sheet Attached					

Brief Description of Arguments to be Presented:

The new claims incorporate the limitations of the dependent, intermediate, & base claims indicated by the examiner to be allowable

An interview was conducted on the above-identified application on Oct. 18, 2006.

NOTE: This form should be completed by applicant and submitted to the examiner in advance of the interview (see MPEP § 713.01).

This application will not be delayed from issue because of applicant's failure to submit a written record of this interview. Therefore, applicant is advised to file a statement of the substance of this interview (37 CFR 1.133(b)) as soon as possible.

Applicant/Applicant's Representative Signature _____

Examiner/SPE Signature Michael J. Zanelli

Proposed Amendment – For Discussion Purposes Only

PATENT APPLICATION

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re the application of:

Attorney Docket No.: 2733.18US01

Jason William Darke

Confirmation No.: 2913

Application No.: 10/517,329

Examiner: Michael J. Zanelli

Filed: December 9, 2004

Group Art Unit: 3661

For: AIRCRAFT BRAKING METHOD AND APPARATUS

AMENDMENT

Mail Stop Amendment
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

INTRODUCTORY COMMENTS

In response to the Office Action of June 22, 2006, and in accordance with the automatic extension of time for response provided by 37 C.F.R. § 1.136(a), amendment to the above-identified patent application is requested.

The present amendment comprises the following sections:

- A. Amendments to the Claims
- B. Amendments to the Drawings
- C. Remarks

Please grant any extension of time necessary for entry; charge any fee due to Deposit Account No. 16-0631.

CERTIFICATE OF FACSIMILE TRANSMISSION

I hereby certify that this paper is being transmitted by facsimile to the U.S. Patent and Trademark Office, Fax No. 571-273-6969 on the date shown below.

Date

Douglas J. Christensen

Proposed Amendment – For Discussion Purposes Only

PATENT APPLICATION

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re the application of:

Attorney Docket No.: 2733.18US01

Jason William Darke

Confirmation No.: 2913

Application No.: 10/517,329

Examiner: Michael J. Zanelli

Filed: December 9, 2004

Group Art Unit: 3661

For: AIRCRAFT BRAKING METHOD AND APPARATUS

AMENDMENT

Mail Stop Amendment
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

INTRODUCTORY COMMENTS

In response to the Office Action of June 22, 2006, and in accordance with the automatic extension of time for response provided by 37 C.F.R. § 1.136(a), amendment to the above-identified patent application is requested.

The present amendment comprises the following sections:

- A. Amendments to the Claims
- B. Amendments to the Drawings
- C. Remarks

Please grant any extension of time necessary for entry; charge any fee due to Deposit Account No. 16-0631.

CERTIFICATE OF FACSIMILE TRANSMISSION

I hereby certify that this paper is being transmitted by facsimile to the U.S. Patent and Trademark Office, Fax No. 571-273-8300 on the date shown below.

Date

Douglas J. Christensen

Proposed Amendment- for discussion purposes only

Application No. 10/517,329

AMENDMENTS TO THE CLAIMS

A detailed listing of all claims that are, or were, in the present application, irrespective of whether the claim(s) remains under examination in the application are presented below. The claims are presented in ascending order and each includes one status identifier. Those claims not cancelled or withdrawn but amended by the current amendment utilize the following notations for amendment: 1. deleted matter is shown by strikethrough for six or more characters and double brackets for five or less characters; and 2. added matter is shown by underlining.

1-18 (Cancelled)

19. (New) A method of applying a braking force to a wheel of an aircraft moving along the ground, wherein the method comprises the steps of:

estimating the conditions at which the wheel would skid;

applying a braking force to the wheel in dependence on the results of the estimating step;

and

the estimating step including both taking into account the vertical load transmitted between the ground and the wheel and taking into account a variable relating to the braking force to be applied.

20. (New) A method according to claim 19, wherein the braking force is applied at a level at which it is judged that the conditions for skidding will not be met whilst maintaining effective braking.

Proposed Amendment- for discussion purposes only

Application No. 10/517,329

21. (New) A method according to claim 19, wherein the estimating step includes taking into account a variable relating to time, whereby estimating the conditions at which the wheel would skid includes estimating when the wheel is likely to skid.

22. (New) A method according to claim 19, wherein the estimating step includes the performance of a calculation, in which a parameter relating to the vertical load transmitted between the ground and the wheel is taken into account.

23. (New) A method according to claim 22, wherein a slip parameter is taken into account when performing the calculation, the slip parameter being such that the amount of slip between the ground and the wheel and the slip parameter are interrelated.

24. (New) A method according to claim 23, wherein data is ascertained regarding the relationship between slip and the ground to wheel friction coefficient and at least some of the data so ascertained is used in the calculation.

25. (New) A method according to claim 23, wherein the method includes recording, over time, data relating to the relationship between the value of the friction coefficient and the value of slip.

26. (New) A method according to claim 23, wherein the method includes ascertaining the slip parameter relating to the slip between the ground and the wheel by means of measuring parameters relating to the aircraft speed and the speed of the periphery of the wheel.

Proposed Amendment- for discussion purposes only

Application No. 10/517,329

27. (New) A method according to claim 19, wherein the method further comprises a step in which a prediction is made regarding how the vertical load will change and the prediction is taken into account when performing the estimating step.

28. (New) A method according to claim 19, wherein the method is so performed that, if a skid is detected, the braking force is reduced in a way that takes into account data relating to the vertical load transmitted between the ground and the wheel.

29. (New) A method according to claim 19, wherein the brakes are actuated by means of a hydraulic system, and the method includes a step of ascertaining a parameter representative of the hydraulic pressure in the brake system, the method including a step of calculating the braking force to be applied to the wheel, the parameter being taken into account when performing that calculation.

1 + 5 + 6 + 8
30. (New) A method of applying a braking force to a wheel of an aircraft moving along the ground, wherein the method comprises the steps of:

ascertaining a first, slip, parameter, the slip parameter being such that the amount of slip between the ground and the wheel and the slip parameter are interrelated;

ascertaining a second, friction coefficient, parameter, the friction coefficient parameter depending on the ground to wheel friction coefficient;

ascertaining a third parameter depending on the vertical load transmitted between the ground and the wheel;

recording, over time, data relating to the relationship between the first and second parameters;

Proposed Amendment- for discussion purposes only

Application No. 10/517,329

estimating the conditions at which the wheel would skid, the estimating step including the performance of a calculation, in which the first, second and third parameters are taken into account; and
applying a braking force to the wheel in dependence on the results of the estimating step.

31. (New) A method according to claim 30, wherein a control unit controls the braking force applied such that the level of slip nears, but does not exceed, a level at which unstable braking starts, the control unit using the recorded data in order to assess the point at which unstable braking starts.

32. (New) A method according to claim 30, wherein at least some of the data relating to the relationship between the first and second parameters is used in the calculation performed in the estimating step.

1+11 33. (New) A method of applying a braking force to a wheel of an aircraft moving along the ground, wherein the method comprises the steps of:

making a prediction concerning how the vertical load transmitted between the ground and the wheel will change;

estimating the conditions at which the wheel would skid, the estimating step taking into account the prediction concerning how the vertical load will change; and

applying a braking force to the wheel in dependence on the results of the estimating step.

11-2-115
1+13 34. (New) A method of applying a braking force to a wheel of an aircraft moving along the ground, the brakes being actuated by means of a hydraulic system, wherein the method comprises the steps of:

Proposed Amendment- for discussion purposes only

Application No. 10/517,329

estimating the conditions at which the wheel would skid;
the estimating step taking into account the vertical load transmitted between the ground and the wheel;
ascertaining a hydraulic pressure parameter representative of the hydraulic pressure in the brake system, calculating the braking force to be applied to the wheel taking into account the results of the estimating step and the hydraulic pressure parameter;
and
applying the braking force so calculated to the wheel.

35. (New) A method according to claim 34, wherein the method includes a step of estimating how the braking force applied changes with changes in ether variables and varying the braking pressure applied to account for the changes in such other variables.

173415-
36. (New) A braking control apparatus for controlling the braking of an aircraft wheel and a processor associated with the braking control apparatus, wherein:

the apparatus is connectable to the brakes of at least one wheel of an aircraft,
the processor is able to be connected to receive in use signals relating to the vertical load transmitted between the ground and the aircraft wheels;
the processor is so arranged that in use it performs a calculation using data derived from the signals received by the control apparatus and estimates the conditions at which the wheel would skid taking into account both the vertical load transmitted between the ground and the wheel and a variable relating to the braking force to be applied; and
the control apparatus is so arranged that in use the control apparatus actuates the brakes in dependence on the results of the calculation performed by the processor,

Proposed Amendment- for discussion purposes only

Application No. 10/517,329

whereby the control apparatus is able to control the actuation of the brakes taking into account the vertical load and other conditions that affect the likelihood of skidding.

1711+15

37. (New) A braking control apparatus for controlling the braking of an aircraft wheel and a processor associated with the braking control apparatus, wherein:

the apparatus is connectable to the brakes of at least one wheel of an aircraft;

the processor is able to be connected to receive in use signals relating to the vertical load transmitted between the ground and the aircraft wheels;

the processor is so arranged that in use it performs a calculation using data derived from the signals received by the control apparatus, the calculation including:

making a prediction concerning how the vertical load transmitted between the ground and the wheel will change, and

estimating the conditions at which the wheel would skid taking into account both the vertical load transmitted between the ground and the wheel and the prediction concerning how the vertical load will change, and

the control apparatus is so arranged that in use the control apparatus actuates the brakes in dependence on the results of the calculation performed by the processor, whereby the control apparatus is able to control the actuation of the brakes taking into account the vertical load and other conditions that affect the likelihood of skidding.

1731+16

38. (New) A control unit and a landing gear assembly for an aircraft, the assembly including at least one aircraft wheel, the control unit being able in use to actuate the brakes of said at least one wheel, wherein:

Proposed Amendment- for discussion purposes only

Application No. 10/517,329

the control unit includes a processor, which is connected to receive data signals relating to the vertical load transmitted between the ground and the aircraft wheels, and which in use performs a calculation using data derived from the data signals received by the processor and estimates the conditions at which the wheel would skid, the estimating step taking into account both the vertical load transmitted between the ground and the wheel and a variable relating to the braking force to be applied, and

the control unit is so arranged that in use the control unit actuates the brakes in dependence on the results of the calculation performed by the processor.

1+11+16

39. (New) A control unit and a landing gear assembly for an aircraft, the assembly including at least one aircraft wheel, the control unit being able in use to actuate the brakes of said at least one wheel, wherein:

the control unit includes a processor, which is connected to receive data signals relating to the vertical load transmitted between the ground and the aircraft wheels, and which in use performs a calculation using data derived from the data signals received by the processor and estimates the conditions at which the wheel would skid, the estimating step taking into account both the vertical load transmitted between the ground and the wheel and a prediction concerning how the vertical load will change, and

the control unit is so arranged that in use the control unit actuates the brakes in dependence on the results of the calculation performed by the processor.

40. (New) An aircraft comprising a braking control apparatus and processor according to claim 36.

Proposed Amendment- for discussion purposes only

Application No. 10/517,329

41. (New) An aircraft comprising a braking control apparatus and processor according to claim 37.

42. (New) An aircraft comprising a control unit and a landing gear assembly according to claim 38.

43. (New) An aircraft comprising a control unit and a landing gear assembly according to claim 39.

Proposed Amendment- for discussion purposes only

Application No. 10/517,329

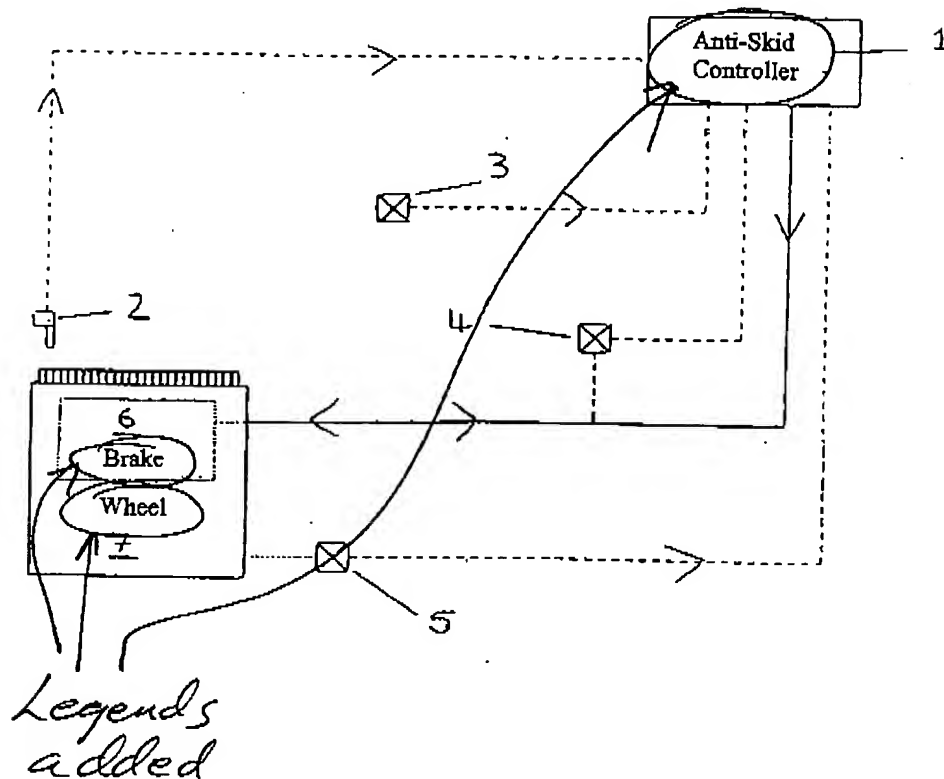
AMENDMENTS TO THE DRAWINGS

FIG. 1 of the drawings was objected to in that blocks 1, 6, and 7 did not have descriptive legends. A new sheet with FIG.1 thereon is submitted herewith including the appropriate legends.

WO 03/104057

PCT/GB03/02506

Application No. 10/517329
Amendment Dated October 17, 2006
Reply to Office Action of June 22, 2006
Annotated Sheet Showing Changes



Proposed Amendment- for discussion purposes only

Application No. 10/517,329

REMARKS

Claims 1-18 are pending. By this Amendment, claims 1-18 are cancelled and new claims 19-43 are added.

35 USC § 102 Rejections

Claims 1, 2, 4-7, 10, 12, and 15-18 were rejected under 35 USC § 102(b) as being anticipated by Hafner(5,167,385). Although the rejection is traversed, the new set of claims have limitations to more particularly distinguish the invention over Hafner.

The examiner indicated claim 3, 8, 9, 11, 13, and 14 would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

With respect to the new claims, independent claim 19 has all of the limitations of previous claim 3 and previous independent base claim 1.

New independent claim 30 has all of the limitations of previous claim 8, intermediate and base claims 6, 5, and 1.

New independent claim 33 has all of the limitations of previous claim 11 and base claim 1.

New independent claim 34 has all of the limitations of previous claim 13 and base claim 1.

New independent claim 36 corresponds to and has limitations of previous claim ³~~11~~ and base claim 1. Additionally, this claim has limitations of previous claim 15.

New independent claim 37 corresponds to and has limitations of previous claim ¹¹~~15~~ and base claim 1. Additionally, this claim includes limitations of previous claim 15

Proposed Amendment- for discussion purposes only

Application No. 10/517,329

New independent claim 38 corresponds to and has limitations of previous claim ~~41~~³ and base claim 1. Additionally, this claim includes limitations of previous claim 16.

New independent claim 39 corresponds to and has limitations of previous claim ~~8~~¹¹ and base claim 1. Additionally, this claim includes limitations of previous claim 16.

Thus, all of the independent claims have at least the limitations that correspond to the specific dependent, intermediate, and base claims that were indicated allowable by the examiner. The balance of the claims, all dependent claims, should also be allowable in that they merely add further limitations to the independent claims identified above that are currently believed to be allowable.

In view of the foregoing, it is submitted that this application is in condition for allowance. Favorable consideration and prompt allowance of the application are respectfully requested.

The Examiner is invited to telephone the undersigned if the Examiner believes it would be useful to advance prosecution.

Respectfully submitted,

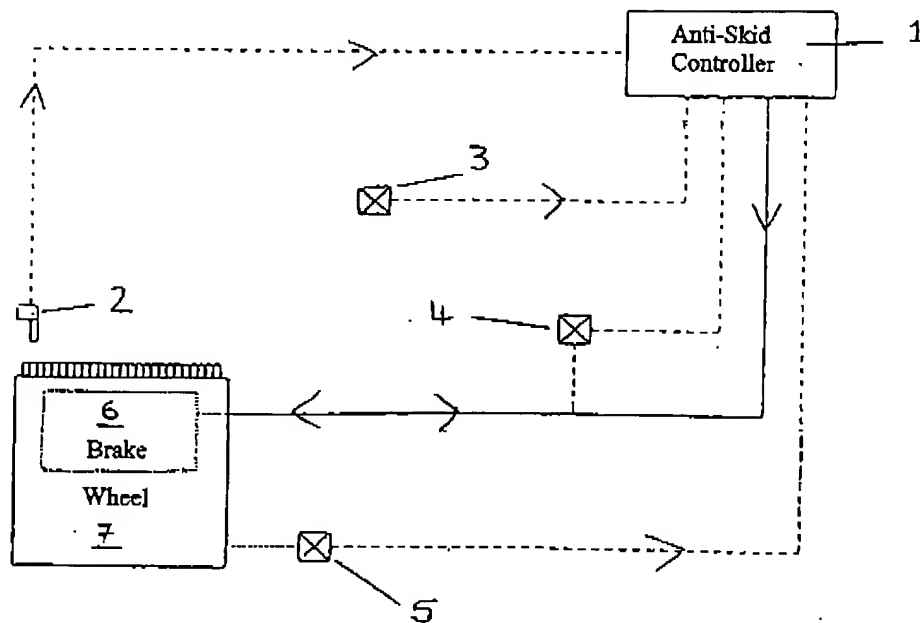
Douglas J. Christensen
Registration No. 35,480

Customer No. 24113
Patterson, Thuent, Skaar & Christensen, P.A.
4800 IDS Center
80 South 8th Street
Minneapolis, Minnesota 55402-2100
Telephone: (612) 349-3001

WO 03/104057

PCT/GB03/02506

Application No. 10/517,329
Amendment Dated October 17, 2006
Reply to Office Action of June 22, 2006
Replacement Sheet

Figure 1